

Title (en)
Distributor plates for composite pressure vessel assemblies and methods

Title (de)
Verteilerplatten für Verbunddruckbehälter-Baugruppen und entsprechende Verfahren

Title (fr)
Plateaux de rupteur pour ensembles de récipient composite sous pression et procédés

Publication
EP 2023032 A1 20090211 (EN)

Application
EP 07121254 A 20071122

Priority
US 83415107 A 20070806

Abstract (en)
The present invention provides: a distributor plate for a composite pressure vessel. The distributor plate includes a thermoplastic polymeric disk having a top side, a bottom side, a perimeter edge and a central opening. Radial slits are formed in the disk to define fluid flow passages through the disk between the central opening and the perimeter edge. The fluid flow passages through the disk are adapted to swirl fluid flowing through the disk from the bottom side to the top side around the central opening. The present invention also provides a water treatment vessel that includes one or more distributor plates, a method for manufacturing a composite pressure vessel that includes one or more of the distributor plates and a method for preparing a composite pressure vessel that includes one or more of the distributor plate for use as a water treatment apparatus.

IPC 8 full level
F17C 1/16 (2006.01); **F17C 1/06** (2006.01)

CPC (source: EP US)
F17C 1/16 (2013.01 - EP US); **Y10T 137/85938** (2015.04 - EP US)

Citation (search report)

- [X] WO 03031860 A1 20030417 - POLYMER & STEEL TECHNOLOGIES H [US], et al
- [X] DE 1945659 A1 19710311 - MARSH ROBERT EDWARD
- [X] US 3662780 A 19720516 - MARSH ROBERT E
- [X] US 3557827 A 19710126 - MARSH ROBERT E
- [A] US 2003136720 A1 20030724 - LAMB DOUGLAS R [US]
- [A] WO 0066264 A1 20001109 - SCHAEFER WERKE GMBH [DE], et al

Cited by
US2024263741A1; WO2015107349A3

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2023032 A1 20090211; EP 2023032 B1 20120104; AT E540259 T1 20120115; CN 101363572 A 20090211; CN 101363572 B 20120222; HK 1124903 A1 20090724; US 2009039009 A1 20090212; US 2010263746 A1 20101021; US 7901576 B2 20110308; US 7963400 B2 20110621

DOCDB simple family (application)
EP 07121254 A 20071122; AT 07121254 T 20071122; CN 200810003547 A 20080118; HK 09102662 A 20090319; US 82598210 A 20100629; US 83415107 A 20070806